

PROJECT NARRATIVE

I. PROJECT PURPOSE

Defining a specific need or purpose

The Neighborhood Knowledge Los Angeles (NKLA) Project, building upon its TIAP planning grant, seeks three-year implementation support to further expand access to the National Information Infrastructure by low and moderate income Los Angeles residents for the purpose of significantly improving neighborhood conditions. Eighteen months ago, NKLA began providing access to public data on neighborhood disinvestment over the Internet (<http://nkla.spsr.ucla.edu>) as part of the **Los Angeles Neighborhood Early Warning System** (see **Appendix A** for a printout of the website). This data has demonstrated how tax delinquencies, unpaid utility bills, mortgage defaults etc. have led to rising numbers of code complaints, as well as health and safety violations. According to the 1995 American Housing Survey, there are approximately 700,000 rental housing units in the City of Los Angeles, and many demonstrate characteristics of deterioration: more than 50,000 rental units were rat-infested in the previous 3 months, nearly 100,000 units experienced leakage in the past 12 months, and approximately 26,000 units had exposed electrical wiring. With the support of the NKLA information system, a broad-based **Community Development Information Coalition (CDIC)** emerged and successfully advocated for stronger and more responsive programs for promoting decent residential standards (see **Appendix B**). To ensure accountability, the CDIC has insisted that the new code enforcement initiative be built upon a transparent, accessible and comprehensive municipal information system aimed at addressing unmet neighborhood needs. In recent months the LA City Council has embraced this agenda, and the NKLA project is now being challenged to use new technologies to facilitate measurable improvements in neighborhood conditions. Since such improvements require new "partnerships for action"--encompassing the private sector, government agencies and low income communities--NKLA seeks to utilize its expanding information program as a vehicle for supporting and strengthening these emerging networks.

In particular, the NKLA team at the **UCLA Advanced Policy Institute (API)** is in a unique position to coordinate municipal action and ensure that these resources are turned outward towards low and moderate income communities. Due in part to research based on NKLA, the City of Los Angeles has adopted plans to revolutionize residential code enforcement, transferring responsibility to the **LA Housing Department (LAHD)** and placing the NKLA team at the center of the new program. The NKLA team is being hired to design and build the new program's internal management information system, along with a seamless outward component: an Internet based system aimed at providing LA's residents access to relevant municipal data fields. The City's **Information Technology Agency (ITA)** is working with the NKLA team to provide public access to government records and electronic mapping at "touch-screen" information kiosks via an expanded high speed fiber network (see Map of the Fiber-Optic Network in **Appendix C**). The ITA will enable the NKLA team to: (1) access the new network lines as they connect the four major civic centers, (2) "pilot" the public dissemination of other relevant municipal data bases currently available only on the City's Local Area Network, and (3) build a series of connecting pages between NKLA and the City's primary web site.

Enthusiasm for NKLA's new comprehensive neighborhood information initiative is certainly spurred by hopes that new technology can help unify a city torn apart by urban unrest

only five years ago and now facing rising threats of political secession. But much will depend not merely on the way municipal data is presented, but on the number of users, especially in low-income and linguistically isolated communities, who can make information a tool for change. NKLA is being challenged to demonstrate that technology can help connect and mobilize neighborhoods across this multi-ethnic, automobile-dependent municipal region. Funds for building the new information systems are coming primarily from municipal sources. The proposed TIIAP implementation grant is therefore aimed largely at improving technology outreach and training by providing information critical to neighborhood survival, notably on new initiatives to enforce decent residential standards and support community revitalization.

Proposing a credible solution with measurable outcomes

This funding request seeks to leverage the local contribution to expand the NKLA Neighborhood Early Warning System (NEWS) into providing a timely, interactive Neighborhood Electronic Monitoring System (NEMS). This system will have six components to help low and moderate income residents, their constituent organizations, elected officials, and other public and private decision makers take better “NOTICE” of LA’s neighborhoods (please refer to the Timeline in **Appendix D**).

Neighborhood Diagnosis and Targeting. Neighborhood decline in Los Angeles is dispersed widely throughout the municipal region, not just concentrated in “inner city” areas. The NKLA project will map neighborhood early warning indicators, pinpointing problem locations for City staff, especially the newly hired code inspectors, as well as for neighborhood residents. This activity will result in annual identification of priority neighborhoods for inspection and assessment of code enforcement coverage.

Outreach and Training Activities. Primary emphasis will be placed on neighborhood-based outreach, but training will also be available for public, private, and nonprofit organizations. Using NKLA maps, the team of NKLA Community Technologists will identify areas of the city in need of outreach, especially neighborhoods where code inspections lag behind other early warning indicators. Working with community-based organizations, staff will help identify and assemble residents interested in improving conditions for two-part workshops. In addition to reviewing the new code enforcement program, Community Technologists will provide hands on training on the use of the Internet to identify problem properties and track inspection activity. Adult participants will receive illustrated handouts on using the NKLA site, while UCLA urban planning graduate students will carry out a “Dream City” design program for participants’ children. Training will take place at local branch libraries with Internet access, at one of the “touch screen” public kiosk meeting areas, or at the Community Development Technologies Center. NKLA will provide at least 200 training sessions over the three year period.

Tracking: System for Code Enforcement Action. NKLA is responsible for building the management system for the City’s new code enforcement program, as well as for producing an Internet-based system that tracks property inspections. This system will be modeled on the FedEx-type system for tracking packages, enabling community residents to monitor governmental response to code complaints and violations (e.g. properties cited, notices delivered, actions taken). Included on the site will be a number of new pages in English, Spanish and Korean on: (1) conducting inspections of your own dwelling unit to identify immediate hazards, (2) contacting City inspectors for a professional analysis of conditions, (3) using electronic versions of complaint letters and other documents, and (4) finding assistance in resolving

housing concerns, including mediation groups. This system will be completed by the end of the Spring quarter 1999.

Integrated Asset Mapping for Los Angeles ("I AM LA"). Neighborhood early warning indicators present only a partial picture of LA's neighborhoods. These communities have important local assets including, churches and community groups, archives of community art and history, innovative social programs and youth activities. To identify and pinpoint community strengths for rebuilding, asset mapping will be utilized to assist residents in identifying local resources. Data for this web pages will come from a variety of sources: neighborhood suggestions, directories of community programs and agencies, community archives projects, and electronic data to be acquired through the UCLA Maps and Government Information Library. The interactive asset mapping component of the site will encompass at least six new databases.

Comprehensive. Automated Data Coordination. The NKLA project will secure new relevant public databases (e.g. from County Health and City and County Fire Departments) and build automated electronic links to database inventories to ensure timely information updates. This evolving information system will utilize a mapping interface that provides ongoing information at the neighborhood level on all public (city, county, state, federal) and private actions (e.g. toxic release notices, investment) which can be mapped at the parcel level. NKLA users will be able to see not only where code citations have been placed, but also whether these citations have been followed by corresponding building permit activity at the same address. Similar to a retail information system that tracks sales automatically recorded at checkout scanners, NKLA will track transaction-based property data to better coordinate and integrate departmental activities with those of neighborhood residents. NKLA will develop at least three automated data update protocols during the three-year grant period.

Evaluation. As the most comprehensive repository of current neighborhood-based public data, NKLA provides a wide range of indicators for measuring changes in residential investment and conditions. The NKLA team anticipates a rapid upsurge in recorded code violations, based on inspecting overlooked properties, but by the end of the three year period these numbers will decline and stabilize. At a minimum, NKLA will demonstrate recorded improvements to five percent of the LA rental housing stock: 35,000 dwelling units. The NKLA project has seen a growing stream of usage, with more than 500 registered users producing more than a thousand "hits" each month. The proposed project will increase the number of registered users four-fold to 2000 by the end of the funding period. However, evaluation will do more than tally additional users, ensuring ongoing assessment of the quality of usage. This will involve developing an evaluation instrument at project initiation, based on interviews with UCLA and community-based service providers and a sample of pilot users. This first stage research will help provide additional direction at the beginning of the project and identify benchmarks for ongoing program improvement. Please see the Evaluation Plan matrix in **Appendix E** for a fuller description of the evaluation component of NKLA.

II. SIGNIFICANCE

Describing innovation

In part because of disparities in access, the primary growth of the Internet has been in the areas of commerce and education, but governmental agencies are increasingly realizing the

advantages of using this new technology to enhance communications, responsiveness and overall accountability. Unfortunately, to realize the full potential of these new technologies government agencies need, but typically lack, two critical elements: (1) the ability to reinterpret and present public data assembled for administrative purposes into something that is broadly meaningful to community residents, and (2) the skills for providing grassroots training and education on technology and urban research. Because areas such as interpretation, analysis, presentation, and training are areas of university expertise, UCLA is at the hub of this project and is demonstrating the innovative role which universities can play in urban systems. On the technical side, important new steps will be taken by building a system with (1) automated overnight database updates, (2) comprehensive and coordinated presentation of data on a geographic interface, and (3) utilization of higher speed fiber network to more efficiently and reliably transmit this detailed picture of the city and its neighborhoods.

Establishing an exemplary project

NKLA is a model for employing Internet technology to deal with residential disinvestment, a problem common to cities throughout the United States. Moreover, the NKLA model could be replicated to address rural issues, tracking information such as employment, agriculture, environment, and migration patterns over the Internet. Similarly, public databases of environmental health and epidemiological indicators (such as air and water pollution, infant mortality rates, etc.) could be provided over the Internet with a geographic interface to enhance public participation in health planning. Just as technology has led to growth and prosperity for commerce in the global marketplace, exemplars, like NKLA, can demonstrate new ways of coordinating public and private action over large distances, involving many participants.

III. PROJECT FEASIBILITY

Technical Approach

Currently, NKLA contains six databases from government sources: Tax Delinquent Properties, Buildings with Code Violations, Department of Water and Power Liens, Rent Escrow Assistance Program, Building Permits, and Affordable Housing Inventory/At-risk. During the implementation phase of the project, these databases will be integrated into a single "backbone" database, referenced by Assessor Parcel Numbers. This will allow users to view comprehensive data on a single property at one time, rather than having to query each database separately. Users will have the choice of viewing data in either text-based or mapped formats. The Beta NKLA Map Room was developed using MapObjects and Internet Map Server software programs, donated by Environmental Systems Research Institute (ESRI), and future expansion of the geographic interface will enable users to map both the property and community asset databases.

The NKLA system will be *interoperable* in that it will utilize leading off-the-shelf software for database management (Microsoft Access and Internet Information Server) and Internet mapping (ESRI's MapObjects and Internet Map Server). Moreover, NKLA will work with ITA and other city departments in order to develop over-night updates of databases through File Transfer Protocol (FTP) programs. NKLA will be hosted on an easily upgrade-able server at UCLA, thus addressing the issue of *scalability*. Because it is Internet-based, NKLA will grow and adapt along with changes in Internet protocol. NKLA continually evolves according to user feedback and will always be well aware of *technical alternatives*. The project is hosted at

UCLA, a leader in the technology field, and will utilize existing and new telecommunications infrastructure, such as the planned LA fiber optic network.

Applicant Qualifications

The lead organization in the project is the **UCLA Advanced Policy Institute (API)**, the outreach and technical assistance arm of the UCLA School of Public Policy and Social Research. API organizes and hosts strategic conferences and provides technical assistance (e.g. Geographic Information System mapping, data analysis) through its Information Technology Center (ITC), home of the NKLA project. Matching resources for the project are provided from throughout the campus, including \$40,000 for the acquisition of databases and other digital information and a direct "Internet 2" line to the city's new fiber network (valued at \$500,000) to ensure rapid communication between the campus and local public agencies. This new network will be especially valuable in strengthening the automated update system for NKLA databases.

In addition to UCLA and the city departments mentioned on page 1, other major partners include: (1) **The LA Community Redevelopment Agency (CRA)**--the city's economic development department--has hired the NKLA team to conduct a 50 year longitudinal study to explore neighborhood decline, redevelopment, and recovery and to electronically disseminate the findings; (2) **The LA Library Department** serves as a critical information source point for local residents with each branch often providing the only link to the World Wide Web in low income communities; (3) **The Community Development Technologies (CDTech) Center** is an applied research, training and technical assistance center based at Los Angeles Trade Technical College and provides a wealth of information services for community development corporations, public agencies, and community residents; (4) **The Southern California Associations of Government (SCAG)** is the regional council of governments and has sponsored a series of NKLA technology training workshops aimed at expanding affordable housing supply in the region; (5) **The Western Center on Law and Poverty (WCLP)** is a policy organization that sponsored UCLA research on the relationship between affordable housing, jobs and welfare reform, which will be presented on the NKLA site.

Budget, Implementation Schedule and Timeline

TIIAP funding will be disbursed on a roughly equal, quarterly basis throughout the three year funding period. With the exception of first quarter start-up and the last quarter closure, each three month period will produce at least 18 technology training sessions, with no less than half of these workshops aimed at lower income residents who were identified by community-based outreach activities. This represents a total in excess of 200 sessions, representing outreach to at least 50 low-income neighborhoods of Los Angeles. See the **Timeline in Appendix D** and detailed Budget Narrative.

Sustainability

During the short period of the TIIAP planning grant, NKLA has been able to amass a wide body of institutional and community support that will help ensure its long-term impact and viability. Both UCLA and local government have a vested interest in seeing NKLA continue past the period of the TIIAP implementation grant. NKLA is firmly rooted at UCLA, and both School of Public Policy and Social Research Dean Barbara Nelson and UCLA Chancellor Albert Camesdale have expressed their support for NKLA because it represents a new public information and policy role that the university can play in the region.

The City of Los Angeles has been a primary sponsor of the project and will continue to support NKLA both financially and institutionally, as it contributes to what Mayor Richard Riordan has called a “technological revolution” in local city government and provides expanded public access to municipal information. Moreover, the NKLA team plans to include other cities from Los Angeles County in the project, creating new sources of financial support. NKLA provides a wealth of information on property and neighborhood dynamics, and academic research funding will be sought to explore relationships among the NKLA data sets. Potential sources of funding include the Public Policy Institute of California and the National Science Foundation. Moreover, the NKLA team will solicit donations and financial contributions from information technology and computer software corporations. NKLA has already established a relationship with ESRI, securing donations of MapObjects and Internet Map Server software.

IV. COMMUNITY INVOLVEMENT

Partnerships and involvement of the community

The success of this implementation project rests largely on the strength of the broad-based Community Development Information Coalition (CDIC) that has been formed during the TIIAP planning grant period. (See attached list of CDIC participants in **Appendix B** and selected letters of support). During the planning period, NKLA personnel conducted more than 50 presentations and training sessions, exposing more than **1,000** persons to the NKLA system. Focus groups helped shape the interface and design of NKLA at each stage of the planning process and these will continue to be important in the implementation project as NKLA expands and evolves. Users often provide feedback on various components of NKLA by sending e-mail messages directly to the NKLA Director, and new parts of the website (e.g. the Map Room) are tested out in a beta format and advertised to the user list to generate comments and suggestions.

Support for end users

NKLA seeks to provide a means by which low-income residents of rental housing in Los Angeles will track neighborhood and property conditions and influence community development and housing policy. The NKLA Community Technologists will work with CDTech, the City of Los Angeles Library Department, nonprofit service organizations, and local community development corporations to ensure that low-income residents: (1) have access to computers and the Internet and (2) are trained in using NKLA and other on-line systems. NKLA staff will train local librarians, university and community college students, and nonprofit organization personnel to use the system, and these organizations will in turn be responsible for recruiting residents for training. Community Technologists will be available to assist in these training sessions, which will: (1) teach residents about the city’s new code enforcement program; (2) show them to conduct research on their neighborhood and building where they live; and (3) demonstrate how residents to track the progress of code complaints. Project evaluators will identify and query individuals who attend workshops but do not utilize the system for additional feedback.

Privacy

In order for users to access the NKLA databases they must first open a free account by providing basic information and describing how they will use the data, and they must agree to a usage agreement. This allows staff to monitor usage and examine how the information is being used to prevent and address neighborhood disinvestment. The data contained in NKLA databases is public record and thus already available to the general public. However, we

recognize that some of the information may be sensitive and therefore will exclude the names of property owners, especially because title can change rapidly and create inaccuracies.

V. REDUCING DISPARITIES

Description and documentation of the disparities

The City of Los Angeles is the second most populous city in the United States with more than 3.6 million residents, and contains 39% of the population of the County of Los Angeles in only 12% of its area. The American Housing Survey documents the vast disparity between rental and non-rental units: the median household income of renter households (\$21,126) was less than half that of owners (\$47,127); nearly 30% of renter households lived below the poverty line, while only 8% of owners did; and more than 18% of renters received public assistance, compared to less than 2% of owners. Moreover, these disparities have widened in recent years, as the number of rental units occupied by tenants living below the poverty level grew 95% between 1989 and 1995. The NKLA planning project demonstrated that neighborhood decline is a widespread, dispersed problem in Los Angeles (see the Code Violation Map in **Appendix F**).

NKLA has seen first hand the disparities between information haves and have-nots in Los Angeles. Universities, governmental agencies, and large businesses tend to be the primary users of Internet technology. NKLA has conducted hands on computer training for low-income community residents and quickly realized that most have had little, if any at all, exposure to computer technology. According to the Los Angeles Times 1996 Technology Poll, only 22% of households with an annual income of less than \$25,000 have personal computers, compared with 69% of those with an income of more than \$50,000. Furthermore, many residents do not speak or read English, thus limiting their accessibility to information technology resources and training.

Strategies for overcoming access barriers

NKLA will overcome these formidable barriers to access in several ways. First of all, NKLA will continue to be bilingual English-Spanish, thus allowing the large Latin American immigrant community to more easily search for property and neighborhood information. Additional pages will also be provided in Korean. Secondly, the NKLA team will work closely with local libraries, schools, and nonprofit organizations--which are often the only Internet access points in low-income communities--to train residents on using NKLA to monitor neighborhood problems. Finally, the Community Technologists will serve as "resource developers" for community based computer access. They will work with community-based organizations to identify funding opportunities for computer hardware and Internet access, thus mobilizing resources for increased information access in low-income communities. Furthermore, the UCLA Urban Planning Department will be providing free Internet-access accounts to "On-line Fellows."

With regard to overcoming access barriers, one particularly valuable lesson from the TIIAP planning period was the importance of creating a seamless integration between Internet site design, data base presentation, and outreach/training activities. The NKLA team learned that those who build the site need to observe first hand how it is being utilized by end-users, not just those familiar with Internet technologies who register on the site, but those who are learning for the first time to "point and click." The ongoing trajectory of the NKLA site to rely more heavily on Internet mapping, rather than a text-based interface, comes from such experience.